

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A catalyst for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde, ~~wherein~~ comprising a metal ~~is~~ supported on a carrier with a total pore volume of 0.40 to 1.50 cc/g as measured by nitrogen gas adsorption method.

Claim 2 (Original): The catalyst for producing an α,β -unsaturated carboxylic acid according to claim 1, wherein the total pore volume of the carrier as measured by nitrogen gas adsorption method is 0.40 to 0.80 cc/g.

Claim 3 (Original): The catalyst for producing an α,β -unsaturated carboxylic acid according to claim 2, wherein a proportion of the pore volume of the mesopore having a pore size of from 2 nm through 50 nm of the carrier as measured by nitrogen gas adsorption method to the total pore volume of the carrier is 40 % or less.

Claim 4 (Original): The catalyst for producing an α,β -unsaturated carboxylic acid according to claim 1, wherein the total pore volume of the carrier as measured by nitrogen gas adsorption method is 0.80 to 1.50 cc/g.

Claim 5 (Original): The catalyst for producing an α,β -unsaturated carboxylic acid according to claim 4, wherein a proportion of the pore volume of the mesopore having a pore size of from 2 nm through 50 nm of the carrier as measured by nitrogen gas adsorption method to the total pore volume of the carrier is 10 % or less.

Claim 6 (Currently Amended): A catalyst for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde, ~~wherein comprising~~ palladium with an average particle diameter in the range of 1 to 8 nm is supported on a carrier.

Claim 7 (Currently Amended): A method for producing the catalyst for producing an α,β -unsaturated carboxylic acid according to ~~any one of claims 1 to 5~~ claim 1, wherein a metal compound is reduced by a reducing agent in the presence of the carrier.

Claim 8 (Currently Amended): A method for producing the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 6, ~~wherein comprising reducing a~~ palladium compound ~~is reduced~~ by a reducing agent in the presence of the carrier.

Claim 9 (Currently Amended): A method for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in the presence of the catalyst for producing an α,β -unsaturated carboxylic acid according to ~~any one of claims 1 to 6~~ Claim 1.

Claim 10 (New): A method for producing the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 2, comprising reducing a metal compound by a reducing agent in the presence of the carrier.

Claim 11 (New): A method for producing the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 3, comprising reducing a metal compound by a reducing agent in the presence of the carrier.

Claim 12 (New): A method for producing the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 4, comprising reducing a metal compound by a reducing agent in the presence of the carrier.

Claim 13 (New): A method for producing the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 5, comprising reducing a metal compound is reduced by a reducing agent in the presence of the carrier.

Claim 14 (New): A method for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in the presence of the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 2.

Claim 15 (New): A method for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in the presence of the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 3.

Claim 16 (New): A method for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in the presence of the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 4.

Claim 17 (New): A method for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in the presence of the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 5.

Claim 18 (New): A method for producing an α,β -unsaturated carboxylic acid through liquid-phase oxidation of an olefin or an α,β -unsaturated aldehyde with molecular oxygen in the presence of the catalyst for producing an α,β -unsaturated carboxylic acid according to claim 6.